## **EUROPEAN SEARCH REPORT**

**Application Number** EP 99 30 6902

| Category | Citation of document with indi  | cation, where appropriate,  | Relevant | CLASSIFICATION OF THE                     |
|----------|---|---|----------|---|
| A        | of relevant passag  HURST, A.: "Nisin"  ADVANCES IN APPLIED Not 27, pages 85-12  NEW YORK, NY, US  * page 116, paragraph paragraph 1; table I   | MICROBIOLOGY,<br>23, XP000577490<br>n 1 - page 117,   | to claim | A23B4/20                                  |
| А        | NYKANEN ET AL.: "The acid, nisin whey permand related combinat count and the sensor; rainbow trout" LEBENSMITTEL WISSENSTECHNOLOGIE., vol. 31, no. 3, 1998 XP000856135 LONDON., GB * page 288; table 3 * page 287, column 1 | meate, sodium chloride ions on aerobic plate y characteristics of CHAFT UND, pages 286-290,                       | 1-25     |   |
| A        | BUNCIC, S. ET AL.: combined listericida lactate, potassium curing salts at refr JOURNAL OF FOOD SAFE vol. 15, no. 2, 1995 XP000856118 XX, XX ISSN: 0149-6085 * page 253, paragrap paragraph 1; figure                       | <pre>1 effects of sodium sorbate , nisin and igeration temperature" TY., , pages 247-264,  th 2 - page 256,</pre> | 1-25     | TECHNICAL FIELDS SEARCHED (Int.CI.7) A23B |
|          | The present search report has b   | een drawn up for all claims  Date of completion of the search   | 1        | Examiner                                  |
|          | Place of search THE HAGUE   | 25 November 199   | .   .    | epretre, F                                |

- Particularly relevant if taken alone
   Particularly relevant if combined with another document of the same category
- A : technological background
  O : non-written disclosure
  P : intermediate document

- E: earlier patent document, but published on, or
- after the filing date

  D: document cited in the application
  L: document cited for other reasons
- & : member of the same patent family, corresponding document

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|  | DOCUMENTS CONSIDE   | ERED TO BE RELEVANT   |  |                |  |
|--|---|---|--|----------------|--|
| Category                                     | Citation of document with indication, where appropriate, of relevant passages t   |   |  |                | CLASSIFICATION OF THE APPLICATION (Int.Ci.7) |
| D,A  | * column 2, line 36<br>* column 2. line 60  | 7-01) - column 2, line 9 * - line 54 * - line 68 * - column 9, line 11 *              | 1-25   |                |  |
| A  | outgrowth of Bacill<br>spores. "<br>JOURNAL OF APPLIED<br>vol. 59, - 1985 pa<br>XP000607980<br>OXFORD, GB<br>* page 127 *<br>* page 128, column   | de interactions on the<br>us licheniformis<br>BACTERIOLOGY,<br>ges 127-132,           |  |                | TECHNICAL FIELDS                             |
| Α  | DELVES-ROUGHTON, J. as a food preservat FOOD TECHNOLOGY, vol. 44, no. 11, 19 CHICAGO, ILLINOIS U* page 111, column * page 112, column   | 90, XP000167846<br>S<br>1, paragraph 3 *  | 1-25   |                | SEARCHED (Int.CI.7)                          |
| D , A  | growth of bacteria  | MENTAL MICROBIOLOGY,  | 1-25   |                |  |
|  | The present search report has   | been drawn up for all claims  |  | ,              |  |
|  | Place of search   | Date of completion of the search  |  |                | Examiner                                     |
|  | THE HAGUE   | 25 November 199   | 19   | Lep            | retre, F                                     |
| X : pa<br>Y : pa<br>doi<br>A : ted<br>O : no | CATEGORY OF CITED DOCUMENTS  rticularly relevant if taken alone rticularly relevant if combined with ano current of the same category chnological background in-written disclosure ermediate document | E : earlier patent<br>after the filing<br>ther D : document cite<br>L : document cite | document, bu<br>date<br>ed in the applied for other re | ut publication | shed on, or                                  |

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Application Number EP 99 30 6902

|                | DOCUMENTS CONSIDERE   | D TO BE RELEVANT   |  | •  |
|----------------|---|--|--|--|
| Category       | Citation of document with indication of relevant passages   | on, where appropriate,   | Relevant<br>to claim                   | CLASSIFICATION OF THE APPLICATION (Int.CI.7) |
| D,A            | US 5 015 487 A (COLLISO<br>14 May 1991 (1991-05-14<br>* the whole document *  |  | 1-25                                   |  |
| A              | GB 844 782 A (APLIN & E   | BARRETT LIMITED)   | 2,3,15,<br>16                          |  |
|                | * examples *  |  |  |  |
| A              | US 3 093 551 A (HALL)<br>11 June 1963 (1963-06-1<br>* column 1, line 49 - 1   |  | 2,3,15,                                |  |
| A              | FOWLER, G.G.: "La cons<br>produits alimentaires a<br>nisine"  | ervation des<br>au moyen de la   |  |  |
|                | REVUE DES FERMENTATIONS<br>ALIMENTAIRES,<br>vol. 34, no. 5, 1979, p   |  |  |  |
|                | XP000856159   | •  |  |  |
|                | * page 158; tables A-C  | *  |  | TECHNICAL FIELDS<br>SEARCHED (Int.CI.7)      |
|                |   |  |  |  |
|                |   |  |  |  |
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|                | The present search report has been of Place of search   | Date of completion of the search   |  | Examiner                                     |
|                | THE HAGUE   | 25 November 199  | 9 Lep                                  | oretre, F                                    |
| X∶par<br>Y∶par | ATEGORY OF CITED DOCUMENTS ticularly relevant if taken alone ticularly relevant if combined with another ument of the same category | T : theory or princ<br>E : earlier patent<br>after the filing<br>D : document cite   | iple underlying the document, but publ | invention<br>lished on, or                   |
| A : tec        | hnological background   |  | same patent famil                      |  |

& : member of the same patent family, corresponding document

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A : technological background O : non-written disclosure P : intermediate document

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## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 30 6902

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

25-11-1999

| Patent document<br>cited in search repo | rt | Publication date |  | Patent family member(s)  | Publication date  |
|---|----|------------------|--|--|---|
| US 4597972                              | A  | 01-07-1986       | AU<br>BE<br>DE<br>ES<br>GB<br>US             | 2025183 A<br>898098 A<br>3345456 A<br>533515 A<br>2141016 A,B<br>4584199 A   | 13-12-198<br>15-02-198<br>13-12-198<br>16-11-198<br>12-12-198<br>22-04-198  |
| US 5015487                              | A  | 14-05-1991       | AT<br>AU<br>CA<br>DE<br>DE<br>DK<br>EP<br>ES | 101322 T<br>639397 B<br>7529191 A<br>2040911 A,C<br>69101153 D<br>69101153 T<br>453972 T<br>0453972 A<br>2062600 T<br>911583 A | 15-02-199<br>22-07-199<br>24-10-199<br>24-10-199<br>24-03-199<br>19-05-199<br>02-05-199<br>30-10-199<br>16-12-199 |
| GB 844782                               | A  |                  | CH<br>DE<br>FR<br>NL<br>NL<br>US             | 370794 A<br>1084436 B<br>1259994 A<br>107427 C<br>228631 A<br>2935503 A  | 18-08-196<br>03-05-196  |
| US 3093551                              | A  | 11-06-1963       | CH<br>DE<br>FR<br>GB<br>NL<br>NL             | 400458 A<br>1195434 B<br>1288358 A<br>916351 A<br>130607 C<br>263328 A   | 08-08-19  |